DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022477 Address: 333 Burma Road **Date Inspected:** 07-Apr-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Zhu Zhong Hai No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

WELDING:

Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 047864 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013AD-008; located On Orthotropic Box Girder (OBG) FL3 to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Qiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR20534. ZPMC Quality Control (QC) Mr.Zhang Qiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1.

Segment 13AW

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector observed ZPMC qualified welding personnel identified as 048696 perform Flux Core Arc Welding (FCAW), weld joint identified as SEG3013F-148; located On Orthotropic Box Girder (OBG) Side Plate to Stiffener CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Qiang. This QA Inspector observed a welding current of approximately 270.8 amps and 27.1 volts and the base material appears to have been being preheated by an electrical heating elements prior to welding .ZPMC Quality Control (QC) Mr. Zhang Qiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-T-2233-ESAB. See attached photo for further details.

Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 067864 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013AD-008; located On Orthotropic Box Girder (OBG) FL3 to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Qiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR20534. ZPMC Quality Control (QC) Mr. Zhang Qiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1.

Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 047864 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013AD-008; located On Orthotropic Box Girder (OBG) Floor Beam to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Qiang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. The Welding Repair Report (WRR) was B-WR20534. ZPMC Quality Control (QC) Mr. Zhang Qiang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.





WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhune, Manoj	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer